

TELEPHONE INTERVIEW SUMMARY AGENDA  
for 10/560,567 (PU030164/156-228)

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DEC 06 2010

(1) 35 U.S.C. 101

(a) We note that the same amendment “In a video encoder, ...” has been accepted (by the instant Examiner) to satisfy 35 U.S.C. 101 rejections in similar (i.e., encoding/decoding) applications. In such applications, the supporting boilerplate has been essentially the same as in the instant application.

(b) As is known to one of ordinary skill in the art, a “video encoder” must necessarily include some hardware. For example, at least a processor and a memory would be required.

(c) While the Examiner has mentioned that the specification describes “a wide variety of embodiments of the video encoder”, all necessarily involve hardware. Moreover, while the Examiner has further mentioned that such embodiments are described at page 6, line 12 to page 7, line 9 of the instant application as including manual operations, such description of “manually” explicitly and directly refers to the function of any *switches* that may be shown in the figures and not to the overall encoder and/or decoder. Again, and most significantly, it is unquestionable to one of ordinary skill in the art that hardware would necessarily be required to implement a video encoder as recited in the pending claims.

(d) The specification explicitly supports hardware based embodiments. For example, page 6, lines 19-21 explicitly recite, *inter alia*, “The functions of the various elements shown in the figures may be provided through the use of dedicated hardware as well as hardware capable of executing software in association with appropriate software”. It is quite evident from simply the preceding sentence alone, that any video encoder embodiment will necessarily involve hardware in all cases, as all cases described in that sentence involve hardware.

(e) While the Examiner has stated that, for example, regarding Claim 1 there is no form of output of output, the Applicants point out that Claim 1 is directed to a method for selecting the

mode of a current macroblock of an inter-coded frame and, hence, at the least, an input includes the modes from which a particular mode is selected, and the output is the selection of the particular mode. The same applies to method claim 37.

(f) Specifically regarding Claim 25, the amended language was essentially suggested by the Undersecretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office David Kappos and has been accepted by other Examiner's for similarly worded claims directed to a "computer-readable non-transitory medium". ). As noted in the memo (hereinafter also referred to as the "Kappos" memo) dated January 26, 2010 from David J. Kappos, "[a] claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. 101 by adding the limitation 'non-transitory' to the claim."

(2) **35 U.S.C. 112, second paragraph**

(a) Regarding Claim 25, the same is explicitly directed to a "computer readable non-transitory medium", where such medium is encoded with signal data comprising a plurality of block transform coefficients". The signal data results from at least one of the steps recited in Claim 25. The preceding interpretation of the claim provided for the Examiner would be readily ascertained and understood by one of ordinary skill in the art from simply the recited language alone. Moreover, we note that since the steps require action, they do not simply represent a collection of data as asserted by the Examiner.

(3) **35 U.S.C. 102**

(i) step 1

(a) Regarding “checking first modes for a subset of macroblock modes”, the Examiner stated that paragraph 57 of Wang demonstrates that subsets of macroblocks within a frame can be encoded in either field or frame mode. However, the claims recite “a subset of macroblock modes”, not “subsets of macroblocks” as argued by the Examiner. Moreover, neither field mode or frame mode are a macroblock mode and, hence, they do not collectively represent a subset of macroblock modes as would be required to anticipate the claims. In further detail, adaptive frame/field (AFF) coding is a typically a picture level coding mode that involves coding a picture in a video sequence of pictures in either field mode or frame mode. Fixed frame/field coding codes ALL pictures in the sequence in the same mode, namely either field or frame mode. While Wang discloses a macroblock level AFF coding scheme, the same involves field and frame modes, which are picture level modes. Thus, even when selectively applying field or frame modes to a macroblock, field and frame modes are still picture level modes and NOT macroblock modes.

(b) Regarding “selectively checking other modes in response to motion vector information of the checked first modes”, the Examiner stated “para. 76 of Wang – motion vector of the current block are determined and the mode selected based on the mode of the current block, the mode of the neighboring block, and either the field-based or frame-based motion vector of the neighboring block”. However, paragraph 76 of Wang is completely silent about how the mode is ultimately selected and only addresses the motion vector itself. That is, paragraph 76 of Wang simply addresses how the prediction motion vector (PMV) is determined from among a field-based motion vector and a frame-based motion vector, but not how a macroblock mode is selected, let alone as recited in the pending claims. Thus, the Examiner’s reference to neighboring blocks and so forth regarding paragraph 76 of Wang pertain to the “selective method” of Wang used to calculate to the prediction motion vector for a block and not a mode. Hence, while the Examiner has stated on page 6 of the pending Office Action that “paragraphs 77-81 of Wang ... describe the macroblock mode selection in greater detail”, such cited paragraphs explicitly relate to selecting a prediction motion vector and NOT a mode as recited in the pending claims. Hence, Wang fails to teach or suggest the first step.

## (ii) step 2

(a) Regarding "checking first modes for a subset of macroblock modes, and selecting the mode for the current macroblock in response to the macroblock mode of the at least one checked neighboring macroblock", the Examiner stated the following on page 6 of the pending Office Action:

paragraphs 76—81 of Wang describes that the mode of the subset of macroblocks is the selected based on the mode of the current block, the mode of the neighboring block, and either the field-based or frame-based motion vector of the neighboring block. Thus, the macroblock mode of the at least one neighboring macroblock is checked and the mode for the current macroblock is selected in response to the macroblock mode of the at least one checked neighboring macroblock.

However, as argued above regarding step 1, the cited paragraphs of Wang relate to the selection/derivation of a prediction motion vector (PMV) and not to selecting a mode for a current macroblock as recited in the pending claims. Moreover, as also argued above, neither a frame mode nor a field mode are a macroblock mode. Hence, Wang fails to teach or suggest the 2<sup>nd</sup> step.

## (iii-iv) steps 3 and 4

Examiner admits Wang does not teach 3<sup>rd</sup> and 4<sup>th</sup> steps (see, e.g., p. 7 of pending Office Action).